

ovalada, un poco comprimida y carinada, con un diente recio en un costado, y termina el otro una punta gruesa formada por el estilo.”

The fruit of the North American plant does not show the

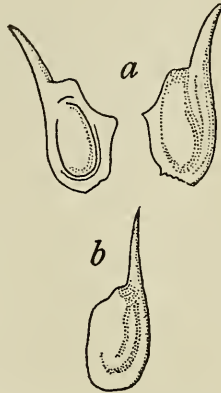


FIG. 1. Achenes of (a) *Myosurus apetalus* and (b) *M. aristatus*.

prominent tooth which characterizes the Chilean plant. This difference has probably been overlooked by all who have referred our species to the latter, a difference which, if constant, should suffice to keep as distinct two forms already separated geographically by thousands of miles.

The accompanying figures and key will serve to elucidate the difference between the two species: Figure *a* is an exact copy of the illustration by Gay* representing the achene of *M. apetalus*.

Achene with prominent keel along the ventral margin, and with a conspicuous tooth-like projection near the middle of the keel.

M. apetalus.

Achene not prominently keeled, nor toothed.

M. aristatus.

WASHINGTON, D. C.

SHORTER NOTES

A NEW FORM OF CORALLORRHIZA.—On June 21, 1916, I found a clump of *Corallorrhiza* near Long's Peak Inn, Larimer Co., Colorado, growing under aspen trees with *Arnica cordifolia* and

* Historia fisca y politica de Chile (Bot.), 1: 31, pl. 1, f. 1 (*a-d*), 1845.

Fragaria. The plants were sparingly infested by a pink aphid of the genus *Macrosiphum*. The "spur" is represented by so slight a swelling that it might fairly be said to be absent; but the plant is related to *C. corallorrhiza* (L.) Karst., not at all to *C. striata* Lindl. or *C. vreelandii* Rydb. The color of the plant suggests *C. ochroleuca* Rydb., but the structure of the flowers is quite different. Possibly we have to do with a distinct species, but it seems best for the present to regard it as a subspecies or race only.

Corallorrhiza corallorrhiza coloradensis n. subsp.

Flowering stems 15–22 cm. high, with 7 to 14 flowers; whole plant pale yellowish-green, the lip whitish, but not truly white, the sepals pale orange-tinted. Lower sepals long and narrow (length 6.75 mm., width 1 mm.); upper sepals scarcely longer than upper petals; upper petals 5 mm. long and 1.75 broad, briefly subacute or obtuse; lateral lobes of tip small, tooth-like; old capsules of last year subovate, about 6 mm. long.

H. Müller has given enlarged figures of the flowers of the true (European) *C. corallorrhiza*. It has the lateral lobes of the lip larger, and the throat is dotted with dark pigment. I have examined numerous descriptions of *C. corallorrhiza*, but they are mostly very imperfect, and presumably made from dry material; none, however, strictly agree with the Colorado plant, and in any event the typical form of the species is that which occurs in Europe.

A word may be added with reference to the Rocky Mountain plants usually called *C. maculata* Raf. or *C. multiflora* Nutt. In 1903 I separated *C. grabhami* from New Mexico, and essentially the same plant occurs in Colorado, as far north as the vicinity of Long's Peak Inn. In 1906 Suksdorf described *C. leimbachiana* from the northwest. Lindley had long before based a variety *occidentalis* on Californian specimens. It is a question whether all these western plants belong to a single species, and if so, whether that species is distinct from the eastern one. Mr. Oakes Ames (litt., June, 1913) wrote: "I have always been impressed by the fact that eastern and western specimens referred to *C. maculata* are distinguishable in the herbarium, and the difference

has been noted by other observers. . . . Whether we can separate the eastern *C. maculata* from the western is a question for serious consideration. That there is a difference between them, nobody who has made a careful study of the subject will deny, but if a geographical demarcation can be made which will show that the two forms occupy distinct or practically distinct ranges I would favor specific differentiation."

There is a variety, *C. maculata* var. *flavida* (*C. multiflora flavida* Waters, Plant World, Nov., 1903) in which the plant is light yellow and the lip lacks the purple spots. Three years later Suksdorf described an apparently analogous form (*C. multiflora* v. *sulphurea*) from the northwest.

According to the present rules, if the western plant is considered a distinct species it will stand as *C. grabhami*; but if a subspecies only, it will be *C. maculata occidentalis* (*C. multiflora occidentalis* Lindl., Gen. and Sp. Orch., 534; 1840.).

T. D. A. COCKERELL

REVIEWS

Wild Flower Preserves *

Billerica.—This number is called "The North Shore, Illinois Edition," and includes parts of Chicago and its adjacent towns. The title page gives a picture of *Cypripedium hirsutum*, with the statement beneath it that "The yellow lady's slipper is happiest in the wild. Don't dig it or pick it, or you will lose it altogether." With this auspicious introduction, the director states that "the whole tendency of the days that have passed in the development and maintenance of public parks and most private estates, has been to destroy natural conditions and the native wild flowers, and to substitute turf and exotic plants in their place." He also believes that "what we need are more reservations that are not parks from the gardener's point of view, but those in which the existing wild flower, shrub, and tree growth will be saved and helped to develop the greatest beauty by judicious thinning, transplanting, seeding and fertilizing as the nature-lover, with a

* By Warren H. Manning, *Billerica*, 4: 3, No. 6, November, 1915.